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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,167	12/15/2003	Mukunda Krishnappa	ALTR:024	4413

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EXAMINER

CHANG, DANIEL D

ART UNIT PAPER NUMBER

2819

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/736,167		KRISHNAPPA ET AL.	
	Examiner		Art Unit	
	Daniel D. Chang		2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-28 and 30-50 is/are rejected.
- 7) ☒ Claim(s) 17 and 29 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Acknowledgement

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 29, 2006 has been entered.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the reference numeral "209" for decompression state machine in Fig. 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: For example, on page 20, the reference numeral 203 was used twice for both control nibble register and decompression state machine. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 21, and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation, “without using an input buffer” is not clear what it means since the plurality of registers 215A-215D (and even register 203) in Fig. 8 is interpreted as an input buffer and the plurality of registers 215A-215D is being used as an input buffer to store the configuration data as described in paragraph 0072 in the specification of the present Application.

For the purposes of expediting prosecution on the merits of the claims, the examiner has attempted to construe the claims to the extent possible for the following art rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16, 18-28, and 30-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Craft et al. (US 5,745,734, hereinafter, "Craft").

Regarding claim 1, Craft discloses, at least in Figs. 2-6, a programmable logic device (PLD)(13), the programmable logic device (PLD) comprising configuration circuitry (17, 25), the configuration circuitry adapted to receive serial configuration data (23; col. 4, lines 46+; col. 1, lines 66+), the configuration circuitry further adapted to program a function of the programmable logic device (PLD) without using an input buffer to store the configuration data (see Fig. 3).

Regarding claim 2, Craft discloses, at least in Fig. 2, that the configuration circuitry receives the serial configuration data from a configuration device (11) external to the programmable logic device (PLD).

Regarding claim 3, Craft discloses, at least in Fig. 2, that the function of the programmable logic device (PLD) is programmed without stalling the configuration device (it is implied. see col. 4, lines 46+).

Regarding claims 4 and 5, it is intended that the function of the programmable logic device (PLD) is programmed in an active (if FPGA 13 is coupled to ROM) or passive (if FPGA 13 is coupled to microprocessor) configuration mode. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 6, Craft discloses, at least in Fig. 2, that the configuration circuitry is further adapted to receive compressed serial configuration data (23; col. 4, lines 46+; col. 1, lines 66+).

Regarding claim 7, Craft discloses, at least in Fig. 2, that the configuration circuitry comprises a decompression circuitry (25), the decompression circuitry adapted to decompress the compressed serial configuration data into decompressed configuration data (col. 4, lines 50+).

Regarding claim 8, Craft discloses, at least in Fig. 2, that the configuration circuitry further comprises a data format converter circuit (see Figs. 3-5), the data format converter circuit adapted to convert the decompressed configuration data into parallel configuration data (e.g. data stored into memory 41).

Regarding claims 18 and 30, Craft discloses that wherein the configuration device comprises a ROM (11) but not explicitly a FLASH memory but it is intended that FLASH memory is used for ROM (11). It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 14, Craft discloses, at least in Fig. 2, that wherein the decompression circuitry comprises a decompression state machine (17).

Regarding claim 15, Craft discloses, at least in Fig. 2, that wherein the data converter further comprises a first register (49), the register adapted to receive the serial compressed data (51) in response to a clock signal (53; col. 8, lines 3+).

Regarding claim 16, Craft discloses, at least in Fig. 2, that wherein the data converter further comprises a plurality of registers (49, 47, 61), adapted to receive the serial compressed data (51) in response to a respective control signal (53, 45, 63) provided by the decompression state machine.

Regarding claims 35 and 36, Craft discloses, at least in Fig. 2, that the programming the function of the programmable logic device comprises programming a programmable logic circuit or programmable interconnect (col. 4, lines 57+).

Claims 9-13, 19-28, 31-34, 37-50 are essentially the same in scope as apparatus claims 1-8, 14-16, and 35-36, and are rejected similarly.

Response to Arguments

Applicant's arguments with respect to claims 1-50 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 17 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the best prior art of record, Craft, taken alone or in combination of other references, does not teach or fairly suggest a data processing system comprising, among other things, that wherein the data

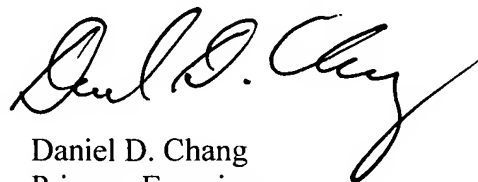
format converter circuit comprises a multiplexer, the multiplexer coupled to the plurality of registers and to the decompression state machine, as set forth in the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (571) 272-1801. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Daniel D. Chang
Primary Examiner
Art Unit 2819

dc

**DANIEL CHANG
PRIMARY EXAMINER**